FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS

OF THE

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT REGARDING THE AMENDMENT OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN) CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

(HCD 05/13)

The Department of Housing and Community Development (HCD) proposes to make necessary changes to be included in the 2013 edition of the California Green Building Standards Code, also known as CALGreen, as presented on the following pages.

LEGEND FOR EXPRESS TERMS:

- 1. Existing California text or language being modified: All language is shown in normal Arial 9 point; modified language is <u>underlined</u> or shown in strikeout.
- 2. Existing text not being modified: All language not displayed in full is shown as "..." (i.e., ellipsis).
- 3. Repealed text: All language appears in strikeout.
- Amended, adopted or repealed language after public hearing: All language is shown in <u>double underline</u> or double strikeout.
- 5. Notation: Authority and Reference citations are provided at the end of each section.

1. HCD proposes to amend Chapter 1, Section 104.1, as follows:

CHAPTER 1 ADMINISTRATION

SECTION 104 DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

104.1 <u>Scope.</u> Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

1. Housing construction.

Application—Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities and uses thereto. Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation "HCD 1."

Enforcing agency—Local building department or the Department of Housing and Community Development.

Authority cited—Health and Safety Code Sections 17921, 17922 and 19990.

Reference—*Health and Safety Code* Sections 17000 through 17060, 17910 through 17990, and 19960 through 19997.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

2. HCD proposes to amend Chapter 2, Section 202, as follows:

CHAPTER 2 DEFINITIONS

SECTION 202 DEFINITIONS

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, <u>electric motorcycles</u>, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE CHARGING STATION(S) (EVCS). One or more spaces intended for charging electric vehicles.

SMALL SOLAR PHOTOVOLTAIC (PV) SYSTEM. A solar photovoltaic system with a maximum power output of less than 10 kW.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

3. HCD proposes to adopt Chapter 4, Section 4.106.4, as follows:

CHAPTER 4 RESIDENTIAL MANDATORY MEASURES

Division 4.1 – PLANNING AND DESIGN

SECTION 4.106 SITE DEVELOPMENT

4.106.4. Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions: On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- 1. Where there is no commercial power supply.
- Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure
 design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or
 the developer by more than \$400.00 per dwelling unit.

NOTE:

4. HCD proposes to adopt Chapter 4, Section 4.106.4.1, as follows:

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

5. HCD proposes to adopt Chapter 4, Section 4.106.4.1.1, as follows:

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

NOTE

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

6. HCD proposes to adopt Chapter 4, Section 4.106.4.2, as follows:

4.106.4.2 New multifamily dwellings. Where 17 or more multifamily dwelling units are constructed on a building site, 3 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging stations (EVCS) capable of supporting future EVSE and shall be identified on construction documents. Calculations for the number of EVCS shall be rounded up to the nearest whole number.

Note: Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. There is no requirement for EVCS to be constructed or available until EV chargers are installed for use.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

7. HCD proposes to adopt Chapter 4, Section 4.106.4.2.1, as follows: Item #7 – CBSC action at July 22, 2014 commission meeting: Further Study Required.

8. HCD proposes to adopt Chapter 4, Section 4.106.4.2.2, as follows:

<u>4.106.4.2.2 Electric vehicle charging station (EVCS) locations.</u> Construction documents shall indicate the location of proposed EVCS. At least one EVCS shall be located in common use areas and available for use by all residents.

When EV chargers are installed, EVCS required by Section 4.106.4.2.1, Item 3, shall comply with at least one of the following options:

- 1. The EVCS shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
- 2. The EVCS shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

9. HCD proposes to adopt Chapter 4, Section 4.106.4.2.3, as follows:

4.106.4.2.3 Single EVCS required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EVCS. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

10. HCD proposes to adopt Chapter 4, Section 4.106.4.2.4, as follows:

4.106.4.2.4 Multiple EVCS required. Construction documents shall indicate the raceway termination point and proposed location of future EVCS and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EVCS at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

11. HCD proposes to adopt Chapter 4, Section 4.106.4.2.5, including "Notes", as follows:

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.

Notes:

- 1. The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm
- See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
- 3. The Governor's Office of Planning and Research (OPR) published a "Zero-Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website: http://opr.ca.gov/docs/ZEV_Guidebook.pdf

4. The Governor's Office of Planning and Research (OPR) has developed draft guidelines, "Plug-In Electric Vehicles: Universal Charging Access Guidelines and Best Practices", addressing physical accessibility standards and design guidelines for EVs. Website: http://opr.ca.gov/docs/PEV_Access_Guidelines.pdf

NOTE:

12. HCD proposes to amend Chapter 4, Table 4.504.3, as follows:

SECTION 4.504 POLLUTANT CONTROL

TABLE 4.504.3 VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS^{2, 3}

Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds

Coating Category	Effective 1/1/2010	Effective 1/1/2012			
Flat coatings	50				
Nonflat coatings	100				
Nonflat - high gloss coatings	150				
<u> </u>	Specialty Coatings				
Aluminum roof coatings	400				
Basement specialty coatings	400				
Bituminous roof coatings	50				
Bituminous roof primers	350				
Bond breakers	350				
Concrete curing compounds	350				
Concrete/masonry sealers	100				
Driveway sealers	50				
Dry fog coatings	150				
Faux finishing coatings	350				
Fire resistive coatings	350				
Floor coatings	100				
Form-release compounds	250				
Graphic arts coatings (sign paints)	500				
High temperature coatings	420				
Industrial maintenance coatings	250				
Low solids coatings ¹	120				
Magnesite cement coatings	450				
Mastic texture coatings	100				
Metallic pigmented coatings	500				
Multi-color coatings	250				
Pre-treatment wash primers	420				
Primers, sealers, and undercoaters	100				
Reactive penetrating sealers	350				
Recycled coatings	250				
Roof coatings	50				
Rust preventative coatings	400 250	250			
Shellacs:	<u>—</u>				
• Clear	730				
 Opaque 	550				
Specialty primers, sealers, and	350 <u>100</u>	100			
undercoaters					
Stains	250				
Stone consolidants	450				
Swimming pool coatings	340				
Traffic marking coatings	100				
Tub and tile refinish coatings	420				
Waterproofing membranes	250				
Wood coatings	275				
Wood preservatives	350				
Zinc-rich primers	340				

- Grams of VOC per liter of coating, including water and including exempt compounds.

 The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
- Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

NOTE:

13. HCD proposes to amend Chapter 4, Section 4.504.4, as follows:

4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with one or more of the following:

- VOC emission limits defined Products compliant with the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
- 2. Products compliant with CHPS criteria certified under <u>UL GREENGUARD Gold (formerly</u> the Greenguard Children & Schools program).
- 3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
- 4. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350).

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

14. HCD proposes to repeal Appendix A4, Section A4.106.8, and adopt new Section A4.106.8, as follows:

APPENDIX A4 RESIDENTIAL VOLUNTARY MEASURES

Division A4.1 – PLANNING AND DESIGN

SECTION A4.106 SITE DEVELOPMENT

A4.106.8 Electric vehicle (EV) charging. Dwellings shall comply with the following requirements for the future installation of electric vehicle supply equipment (EVSE).

A4.106.8 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections A4.106.8.1 and A4.106.8.2 to facilitate future installation and use of electric vehicle chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

15. <u>HCD proposes to repeal Appendix A4, Section A4.106.8.1, and adopt new Section A4.106.8.1, as follows:</u>

A4.106.8.1 One-and two-family dwellings. Install a listed raceway to accommodate a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1 inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. Raceways are required to be continuous at enclosed or concealed areas and spaces. A raceway may terminate in an attic or other approved location when it can be demonstrated that the area is accessible and no removal of materials is necessary to complete the final installation.

Exception: Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 EVSE.

Note: Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.

A4.106.8.1 New one- and two-family dwellings and townhouses with attached private garages.

Tier 1 and Tier 2. For each dwelling unit, a dedicated 208/240-volt branch circuit shall be installed in the raceway required by Section 4.106.4.1. The branch circuit and associated overcurrent protective device shall be rated at 40 amperes minimum. Other electrical components, including a receptacle or blank cover, related to this section shall be installed in accordance with the *California Electrical Code*.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

16. <u>HCD proposes to repeal Appendix A4, Section A4.106.8.1.1, and adopt new Section A4.106.8.1.1, as follows:</u>

A4.106.8.1.1 Labeling requirement. A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.

A4.106.8.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device designated for future EV charging purposes as "EV READY" in accordance with the California Electrical Code. The receptacle or blank cover shall be identified as "EV READY."

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

17. HCD proposes to repeal Appendix A4, Section A4.106.8.2, adopt new Section A4.106.8.2, and add "Notes", as follows:

A4.106.8.2 Multifamily dwellings. At least 3 percent of the total parking spaces, but not less than one, shall be capable of supporting future electric vehicle supply equipment (EVSE).

A4.106.8.2 New multifamily dwellings.

Tier 1 and Tier 2. Where 17 or more multifamily dwelling units are constructed on a building site, 5 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging stations (EVCS) capable of supporting future EVSE and shall be identified on construction documents. Calculations for the number of EVCS shall be rounded up to the nearest whole number.

See Section 4.106.4.2 for additional requirements related to EVCS for multifamily dwellings.

Notes:

- The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: www.dot.ca.gov/hg/traffops/signtech/signdel/policy.htm
- See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
- The Governor's Office of Planning and Research (OPR) published a "Zero-Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website: http://opr.ca.gov/docs/ZEV_Guidebook.pdf
- The Governor's Office of Planning and Research (OPR) has developed draft guidelines, "Plug-In Electric Vehicles: Universal Charging Access Guidelines and Best Practices", addressing physical accessibility standards and design guidelines for EVs. Website: http://opr.ca.gov/docs/PEV_Access_Guidelines

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

18. HCD proposes to repeal Appendix A4, Section A4.106.8.2.1, as follows:

A4.106.8.2.1 Single charging space required. When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1 inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.

Exception: Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 EVSE.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

19. HCD proposes to repeal Appendix A4, Section A4.106.8.2.2, as follows:

A4.106.8.2.2 Multiple charging spaces required. When multiple charging spaces are required, plans shall include the location(s) and type of the EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all the electrical vehicles at all designated EV charging spaces at their full rated amperage. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction.

Note: Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

20. HCD proposes to repeal Appendix A4, Section A4.106.8.2.3, as follows:

A4.106.8.2.3 Labeling requirement. A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and the EV charging space.

NOTE:

21. HCD proposes to renumber Appendix A4, Section A4.107 "Innovative Concepts and Local Environmental Conditions" to Section A4.108, and adopt new Sections A4.107. A4.107.1 and A4.107.2. as follows:

SOLAR PHOTOVOLTAIC (PV) SYSTEMS

A4.107.1 General. Solar photovoltaic (PV) systems provide a significant source of clean and renewable energy, and are encouraged to be installed to reduce the demand on non-renewable sources of energy. A streamlined permit process for solar PV systems simplifies the structural and electrical review of the PV system, can minimize the need for detailed engineering studies, and avoids unnecessary delays.

A4.107.2 Small solar photovoltaic (PV) systems streamlined permitting process. Small solar photovoltaic (PV) systems shall be reviewed and approved through a streamlined permitting process and shall include: a standard checklist identifying the required documentation to be submitted with the permit application; a standard plan for describing the proposed solar PV system; and an inspection checklist identifying all elements of the solar PV system to be inspected before final approval.

Tier 1. Establish one or more of the following:

- 1. A local streamlined permitting process.
- 2. A streamlined permitting process based on the "California Solar Permitting Guidebook."
- 3. Internet access to permit application materials through the local agency's website.
- 4. An "over-the-counter" PV plan review.

Tier 2. Meet the requirements of Tier 1; plus establish:

- 1. An "on-line" web-based system for permit application submittals and permit issuance; and
- 2. A local streamlined inspection process; or
- 3. A streamlined inspection process based on the "California Solar Permitting Guidebook."

Note: Templates and other information are available in the "California Solar Permitting Guidebook" developed by the Solar Permitting Workgroup and the Governor's Office of Planning and Research (OPR) at: http://opr.ca.gov/docs/California Solar Permitting Guidebook.pdf

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

22. HCD proposes to renumber Appendix A4, Sections A4.107 and A4.107.1, to new Sections A4.108 and A4.108.1, as follows:

SECTION 44.107 A4.108 INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS

A4.107.1 <u>A4.108.1</u> Innovative concepts and local environmental conditions. The provisions of this code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design or method of construction not specifically prescribed by this code. This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.

NOTE:

23. HCD proposes to amend Appendix A4, Section A4.504.2, as follows:

Division A4.5 – ENVIRONMENTAL QUALITY

SECTION A4.504 POLLUTANT CONTROL

A4.504.2 Resilient flooring systems. Resilient flooring systems installed in the building shall meet the percentages specified in this section and comply with the VOC emission limits defined in at least one of the following:

- VOC emission limits defined Products compliant with the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
- 2. Products compliant with CHPS criteria certified <u>UL GREENGUARD GOLD (formerly under the Greenguard Children & Schools program.)</u>
- 3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
- 4. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350.)
- **Tier 1.** At least 90 percent of the total area of resilient flooring installed shall comply.
- Tier 2. 100 percent of the total area of resilient flooring installed shall comply.

Exception for Tier 2: An allowance for up to 5 percent specialty purpose flooring may be permitted.

Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

24. HCD proposes to amend Appendix A4, Section A4.504.3, as follows:

A4.504.3 Thermal insulation. Thermal insulation installed in the building shall meet the following requirements:

Tier 1. Install thermal insulation in compliance with the VOC-emission limits defined in California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database; products compliant with CHPS criteria certified under the UL GREENGUARD Gold (formerly Greenguard Children & Schools program); or meet California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350).

Tier 2. Install insulation which complies with Tier 1 plus does not contain any added formaldehyde.

Note: Documentation must be provided that verifies the materials are certified to meet the pollutant emission limits in this section.

NOTE:

25. HCD proposes to amend Appendix A4, Section A4.601.4.2, as follows:

Division A4.6 - TIER I AND TIER 2

SECTION A4.601 GENERAL

A4.601.4.2 Prerequisite and elective measures for Tier 1. In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 1 status:

- 1. From Division A4.1, Planning and Design.
 - 1.1 Comply with the topsoil protection requirements in Section A4.106.2.3.
 - 1.2 Comply with the 20 percent permeable paving requirements in Section A4.106.4
 - 1.3 Comply with the cool roof requirements in Section A4.106.5
 - 1.4 Comply with the electric vehicle charging requirements in Section A4.106.8.
 - 1.5 Comply with the solar photovoltaic (PV) system streamlined permitting process in Section A4.107.2.
 - 1.6 Comply with at least two elective measures selected from Division A4.1.
- 2. From Division A4.2, Energy Efficiency. (No change to text)
- 3. From Division A4.3, Water Efficiency and Conservation. (No change to text)
- 4. From Division A4.4, Material Conservation and Resource Efficiency. (No change to text)
- 5. From Division A4.5, Environmental Quality. (No change to text)

Note: ... (No change to text)

NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

26. HCD proposes to amend Appendix A4, Section A4.601.5.2, as follows:

Division A4.6 - TIER I AND TIER 2

SECTION A4.601 GENERAL

A4.601.5.2 Prerequisite and elective measures for Tier 2. In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 2 status:

- 1. From Division A4.1, Planning and Design.
 - 1.1 Comply with the topsoil protection requirements for Tier 1 and Tier 2 in Section A4.106.2.3.
 - 1.2 Comply with the 30 percent permeable paving requirements in Section A4.106.4.
 - 1.3 Comply with the cool roof requirements in Section A4.106.5.
 - 1.4 Comply with the Tier 1 electric vehicle (EV) charging requirements in Section A4.106.8.
 - 1.5 Comply with the solar photovoltaic (PV) system streamlined permitting for Tier 1 and Tier 2 in Section A4.107.2.
 - 1.6 Comply with at least four elective measures selected from Division A4.1.
- 2. From Division A4.2, Energy Efficiency. (No change to text)
- 3. From Division A4.3, Water Efficiency and Conservation. (No change to text)
- 4. From Division A4.4, Material Conservation and Resource Efficiency. (No change to text)
- 5. From Division A4.5, Environmental Quality. (No change to text)

Note: ... (No change to text)

NOTE:

27. HCD proposes to amend the "Residential Occupancies Application Checklist" (Appendix A4, Section A4.602) as follows:

SECTION A4.602 RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST Effective January 1, 2014 Effective July 1, 2015

	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD			
		Prerequis electi	sites and ves ¹	Enforcing Agency	Installer or Designer	Third party	
FEATURE OR MEASURE	Mandatory	Tier 1	Tier 2	□ All	□ All	□ All	
PLANNING AND DESIGN							
Site Selection							
Site Development							
4.106.3 Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.							
4.106.4 Provide capability for electrical vehicle charging in one- and two-family dwellings and in townhouses with attached private garages; and 3 percent of total parking spaces, as specified, for multifamily dwellings.							
A4.106.8 Provide capability for the installation of electrical vehicle supply equipment in single-family and multifamily structures.			₽				
A4.106.8.1 Tier 1 and Tier 2 for one- and two-family dwellings and townhouses with attached private garages. Install a dedicated 208/240-volt, branch circuit, including an overcurrent protective device rated at 40 amperes minimum per dwelling unit.							
A4.106.8.2 Tier 1 and Tier 2 for multifamily dwellings. Provide capability for future electric vehicle charging in 5 percent of total parking spaces, as specified.							

	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD			
		Prerequis electi		Enforcing Agency	Installer or Designer	Third party	
FEATURE OR MEASURE	Mandatory	Tier 1	Tier 2	□ All	□ All	□ All	
A4.107.2 Provide a streamlined permit process for small solar photovoltaic (PV) systems. Tier 1. Adopt a local streamlined permitting process or the "California Solar Permitting Guidebook" streamlined permitting process; or provide internet access to permit application materials through the local					□		
agency's website, or provide "over the counter" PV plan review.		П			口		
Tier 2. Meet Tier 1 plus provide an "on-line" web based system for permit application submittals and permit issuance and development adopt a local streamlined inspection process; OR adopt the "California Solar Permitting Guidebook" streamlined inspection process.							
Innovative Concepts and Local Environmental Conditions							
A4.107.1 A4.108.1 Items in this section are necessary to address innovative concepts or local environmental conditions.							
Item 1							
Item 2							
Item 3							
Energy Efficiency ENERGY EFFICIENCY							
General							
Outdoor Water Use							
A4.304.6 For new water service connections, landscaped irrigated areas more than 2,500 square feet shall be provided with separate submeters or metering devices for outdoor potable water use.							

	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD			
		Prerequisites and electives ¹		Enforcing Agency	Installer or Designer	Third party	
FEATURE OR MEASURE	Mandatory	Tier 1	Tier 2	□ All	□ All	□ All	
Pollutant Control							
4.504.4 80 percent of floor area receiving resilient flooring shall comply with the specified VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database or be certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; or meet California Dept. of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350.) criteria.							
A4.504.3 Thermal insulation installed in the building shall meet the following requirements: Tier 1. Install thermal insulation in		⊠²					
compliance with the VOC-emission limits. defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List.							
Tier 2. Install insulation which contains No- Added Formaldehyde (NAF) and is in compliance with the VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List Tier 1.			⊠ ²				
Interior Moisture Control							
Indoor Air Quality and Exhaust							
A4.506.1 Return air filters with a value greater than MERV 6 shall be installed on HVAC systems. Pressure drop across the filter shall not exceed 0.1 inches water column.							

Green building measures listed in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.
2 Required prerequisite for this Tier.